

IN THE CLAIMS

1. **(Currently Amended)** A server comprising:

a communications module operable to receive a dual communication packet from a client over a first channel, the dual communication packet including a header having a client external IP address and a data payload having an **[[encoded]] encrypted** port command having a client internal IP address and a client data port number;

a codec operable to **[[decode]] decrypt** the port command;

a translation module operable to retrieve the client external IP address from the header and to generate a modified port command including the external IP address; and

the server operable to establish a second channel based on the modified port command.

2. **(Original)** The server of Claim 1, further comprising a packet filtering server firewall.

3. **(Previously Presented)** The server of Claim 2, further comprising a network address translator associated with the server firewall, the network address translator operable to include a static network address translation entry for each of the client and the server.

4. **(Original)** The server of Claim 1, further comprising a file transfer protocol (FTP) communication module wherein the communication session between the server and the client over the second channel is conducted in secure FTP.

5. **(Currently Amended)** The server of Claim 1, wherein the codec is operable to **[[decode]] decrypt** based on secure socket layer (SSL) encryption technology.

6. **(Currently Amended)** A client, comprising:
 - a communications module operable to receive a communication packet from a server over a first channel, the communication packet including a header having a server external IP address and a data payload having an **[[encoded]] encrypted** port command having a server internal IP address and a server data port number;
 - a codec operable to **[[decode]] decrypt** the port command;
 - a translation module operable to retrieve the server external IP address from the header and to generate a modified port command including the external IP address; and
 - the server operable to establish a second channel based on the modified port command.
7. **(Original)** The client of Claim 6, further comprising a packet filtering client firewall.
8. **(Previously Presented)** The client of Claim 7, further comprising a network address translator associated with the client firewall, the network address translator operable to include a static network address translation entry for each of the client and the server.
9. **(Previously Presented)** The client of Claim 6, further comprising a file transfer protocol (FTP) communication module wherein a communication session between the server and the client over the second channel is conducted in secure FTP.
10. **(Currently Amended)** The client of Claim 6, wherein the codec is operable to **[[decode]] decrypt** based on secure socket layer (SSL) encryption technology.

11. **(Currently Amended)** A method for establishing a data socket between first and second peers, comprising:

receiving an IP Packet from the first peer, the IP packet including a header and a port command;

the header including a first peer IP address and the port command including an **[[encoded]] encrypted** second peer IP address;

decoding the **[[encoded]] encrypted** second peer IP address;

retrieving the first peer IP address from the header;

generating a modified port command including the first peer address in place of the second peer IP address; and

using the modified port command to establish a data socket between the first and second peers.

12. **(Currently Amended)** A method for establishing a transient channel over a non-transient channel, comprising:

receiving an IP packet over the non-transient channel, the IP packet including a header and a port command;

the header including a first peer IP address and the port command including an **[[encoded]] encrypted** second peer IP address;

decoding the **[[encoded]] encrypted** second peer IP address;

retrieving the first peer IP address from the header;

generating a modified port command including the first peer IP address in place of the second peer IP address; and

using the modified port command to establish the transient channel between a server and a client.

13. **(Currently Amended)** A computer readable medium encoded with a computer program operable to:

receive an IP packet from a first peer, the IP packet including a header and a port command;

the header including a first peer IP address and the port command including an **[[encoded]] encrypted** second peer IP address;

[[decode]] decrypt the **[[encoded]] encrypted** second peer IP address;

retrieve the first peer IP address from the header;

generate a modified port command including the first peer IP address in place of the second peer IP address;

establish a data socket between the first peer and a second peer using the modified port command.

14. **(Currently Amended)** A method for establishing a data socket between a server and a client, comprising:

encoding a port command including a client internal IP address and a client port number;

generating a dual channel communication packet having a header and a data payload, the header including a server external IP address, server port number, the client internal IP address and the client port number;

the data payload including the **[[encoded]] encrypted** port command;

transmitting the communication packet between the server and the client;

decoding the port command;

retrieving a client external IP address from the header;

modifying the **[[decoded]] decrypted** port command by overriding the client internal IP address within the **[[decoded]] decrypted** port command with the client external IP address retrieved from the header; and

establishing a data socket between the server and the client using the modified **[[decoded]] decrypted** port command.

15. **(Original)** The method of Claim 14, further comprising readdressing the client internal IP address within the header with the client external IP address, at a client firewall.

16. **(Previously Presented)** The method of Claim 14, further comprising readdressing the server external IP address within the header with a server internal IP address at a server firewall.

17. **(Currently Amended)** A method for establishing a data socket between a server and a client, comprising:

transmitting a passive command to the server;

encoding a port command including a server private IP address and a server port number;

creating a dual channel communication packet having a header and a data payload, the header including a client external IP address, client port number, a server internal IP address and the server port number;

the data payload including the **[[encoded]] encrypted** port command;

transmitting the communication packet to the client;

decoding the port command;

retrieving a server external IP address from the header;

modifying the **[[decoded]] decrypted** port command by overriding the server internal IP address within the **[[decoded]] decrypted** port command with the server external IP address retrieved from the header; and

establishing a data socket between the server and the client using the modified **[[decoded]] decrypted** port command.

18. **(Previously Presented)** The method of Claim 17, further comprising readdressing the server internal IP address within the header with the server external IP address at a server firewall.

19. **(Previously Presented)** The method of Claim 17, further comprising readdressing the client external IP address in the header with a client internal IP address, at a client firewall.

20. **(Currently Amended)** A method for transferring information over an external network, comprising:

- establishing a control channel between a server and a client;
- identifying a first end point at a first one of the server and the client, the first end point including a first portion and a second portion;
- encoding the first end point in a secure format;
- encapsulating the **[[encoded]] encrypted** first end point in a transmission packet including an address header having the private address of the first end point;
- translating the private address in the address header into a public address for transmitting over the external network;
- transmitting the transmission packet over the external network in the control channel;
- receiving the transmission packet at the other one of the client and the server;
- decoding the first end point; and
- modifying the end point by replacing the first portion in the **[[decoded]] decrypted** end point with the public address in the address header, and establishing a data channel between the client and the server using the modified end point.

21. **(Previously Presented)** An electronic [[A]] signal for establishing a dual channel communication between remote nodes, **the electronic signal embodied at least temporarily in computer-readable media and** comprising:

- a modified dual channel command for establishing a transient data channel between remote nodes; and

- the modified dual channel command including a public IP address of a peer node copied from an IP header of a packet transmitting the dual channel command.